

COLLEGE OF CHEMISTRY COURSE GUIDE (../INDEX.HTML)

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MATH 136 - INCOMPLETENESS AND UNDECIDABILITY (4 UNITS)

(Taken from the UC Berkeley Course Guide (<http://guide.berkeley.edu>))

COURSE OVERVIEW

SUMMARY

Functions computable by algorithm, Turing machines, Church's thesis. Unsolvability of the halting problem, Rice's theorem. Recursively enumerable sets, creative sets, many-one reductions. Self-referential programs. Godel's incompleteness theorems, undecidability of validity, decidable and undecidable theories.

PREREQUISITES

[MATH 53](#) [MATH 54 \(math54.html\)](#) and MATH 55

WORKLOAD

TIME COMMITMENT

3 hours of lecture per week

UC Berkeley Course Guide (<http://guide.berkeley.edu>)

COLLEGE OF CHEMISTRY PEER SERVICES

Made by Angela Lee, c/o 2019



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